. Measurements.	М.
Vertical extent of right pharyngeal	.020
Length of proximal limb	.009
" of tooth line	.009
" of distal limb	.009
Width at first tooth	.004
" at second tooth	.008
Length of third tooth	.005

Found by Chas. H. Sternberg in the Pliocene of Oregon.

On some Saurians found in the Triassic of Pennsylvania, by C. M. Wheatley.

By E. D. COPE.

(Read before the American Philosophical Society, Dec. 21, 1877.)

THECODONTOSAURUS GIBBIDENS Sp. nov.

The only remains of this saurian which have come into my hands are two teeth. They are in good preservation, lacking only the great part of the root. They present the leaf-like outline characteristic of the genus, the crown being strongly distinguished from the narrower root. The form is quite robust, and contracts gradually to the apex. The cutting anterior and posterior edges bound the inner face of the crown, from which they are separated by a groove along their bases. They are interrupted by coarse serrations, the apices of the denticles being directed upwards. These are much reduced in size at the base of the crown. The cutting edges are not separated from the external face by grooves. This face is very convex and perfectly smooth. The inner face is convex between the grooves and is marked with six or seven continuous sulci, which are obsolete at the base.

The saurian which possessed the tooth described was not of large proportions. The species differs from the English form in many respects; e.g., the greater convexity of the external face; the basal grooves of the cutting edges, the grooving of the inner face, the abrupt constriction below the base of the crown, etc.

	Measurements.	M.
Diameter of crown { antero-posterior	antero-posterior	.0070
	transverse	.0045
Length of crown		.0038

Palæosaurus fraserianus sp. nov.

But few remains indicate this species. It is established primarily on a tooth, which presents the characters of *Palæosaurus cylindrodon*. It has opposite denticulate cutting edges, an anterior and posterior, of which the latter extends to the base of the crown, and the anterior but half way from the apex. The posterior is denticulate throughout, while denticulation is visible on the anterior edge for but one-third the distance from the apex. The posterior edge is more compressed. The surface of the cementum is obsoletely finely linear ridged, and there are no sulci or other sculpture. The crown is regularly and gently curved backwards.

Measurements.	M.
Length of the crown	.0200
Antero-posterior diameter of crown at base	.0065

This saurian is dedicated to my friend, Persifor Frazer, Jr., in charge of one of the districts into which the State of Pennsylvania is divided for the conduct of the second geological survey. This district embraces the Triassic region, which has been extensively and ably investigated by Prof. Frazer.

SUCHOPRION AULACODUS Cope.

Paleoctorus anlacodus Cope, Paleontological Bulletin, No. 26, p. 184. Several additional teeth of this species show that the tooth from which I first determined it is one of the flattest of the series, and that those from other positions in the jaws, instead of being flatter as in Paleoctorus, are narrower, and of the usual form of those of Suchoprion.

This saurian possesses teeth of the size of the average of those of the *S. cyphodon*, and which are like them, well compressed in the antero-posterior direction. The surface is therefore very convex between the cutting edges, especially on the external face, and the transverse diameter at the base of the crown exceeds the antero-posterior. The cutting edges only extend half way from the apex, and are but little denticulated. The surface of the cementum is minutely and sharply linearly sculptured. It is in addition, thrown into coarse continuous grooves on the basal two-thirds of the crown, excepting for a short distance on the inner side of each cutting edge. There are seven grooves on the inner face, and eighteen on the outer face. On the latter the minute sculpture is least distinct.

Measurements.	M.
Length of crown	.0260
Diameter of base of crown { fore and att	.0160
transverse	.0115

The short slightly denticulate cutting edges and the strongly grooved surface distinguish the anterior teeth of this species at once from the *S. cyphodon*. Several specimens have been found by Mr. Wheatley.